## **ABSTRACT**

The present invention provides a method for the detection of inflammation in animals using infrared thermography. The invention also provides a method for the diagnosis of infections, diseases or disorders that induce inflammation using infrared thermography. The present invention is based on the surprising discovery that temperature differences less than 1°C are clinically significant. This discovery was made possible by employing an induction model of mastitis, which allowed the Applicants to evaluate inflammation resulting from a known etiology and to compare the infrared patterns obtained using an infrared camera with outcomes obtained with other diagnostic procedures. Accordingly, Applicants discovered that temperature differences less than 1°C indicate early or subclinical inflammation, and that temperature differences greater than 1°C indicate later stages of development of inflammation.